

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | | |
|------------------------|-------------|------------|----------------------|---------------------|------------------|--|--|
| 10/710,678 07/28/2004 | | 07/28/2004 | Harold Sun | 81081067 | 4677 | | |
| 46535 | 7590 | 01/18/2006 | | EXAM | EXAMINER | | |
| BIR LAW, 45094 MIDI | | | TRIEU, T | TRIEU, THAI BA | | | |
| CANTON, MI 48188-3215 | | | | ART UNIT | PAPER NUMBER | | |
| | | | | 3748 | | | |

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Puta

| | | Applica | ation No. | Applicant(s) | | | | | |
|--|--|---|--|---|-------------|--|--|--|--|
| Office Action Summary | | | ,678 | SUN ET AL. | | | | | |
| | | | ner | Art Unit | | | | | |
| | | Thai-Ba | a Trieu | 3748 | <u> </u> | | | | |
| Period fo | The MAILING DATE of this communic or Reply | ation appears on | the cover sheet | with the correspondence ac | idress | | | | |
| WHIC - Exter after - If NC - Failu Any | ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MA asions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this community period for reply is specified above, the maximum stature to reply within the set or extended period for reply within the set or extended period for reply within the set or extended period for reply with the perio | ILING DATE OF 37 CFR 1.136(a). In no nication. tory period will apply and II, by statute, cause the | THIS COMMUIT event, however, may divil expire SIX (6) Mapplication to become | NICATION. a reply be timely filed ONTHS from the mailing date of this of ABANDONED (35 U.S.C. § 133). | | | | | |
| Status | | | | | | | | | |
| 1)[汉] | Responsive to communication(s) filed | on 28 November | 2005 | | | | | | |
| • | · |)⊠ This action is | <u> </u> | | | | | | |
| • | | ·— | | atters, prosecution as to the | e merits is | | | | |
| ٥,۵ | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | | |
| Dispositi | on of Claims | | | | | | | | |
| · · | 4)⊠ Claim(s) <u>1-3,6-23 and 25</u> is/are pending in the application. | | | | | | | | |
| - | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | | |
| 5) Claim(s) 7.8.12-23 and 25 is/are allowed. | | | | | | | | | |
| · | 6)⊠ Claim(s) <u>1-3</u> is/are rejected. | | | | | | | | |
| · | Claim(s) <u>6 and 9-11</u> is/are objected to | | | | | | | | |
| - | Claim(s) are subject to restriction | | n requirement. | | | | | | |
| Applicati | on Papers | | | | | | | | |
| | The specification is objected to by the | Evaminar | | , | • | | | | |
| • | | | sted or b\□ obi | ected to by the Evaminer | | | | | |
| 10) The drawing(s) filed on 28 July 2004 is/are: a) accepted or b) objected to by the Examiner. | | | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | | |
| Priority u | ınder 35 U.S.C. § 119 | | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | | | | |
| | 1. Certified copies of the priority documents have been received. | | | | | | | | |
| | 2. Certified copies of the priority documents have been received in Application No | | | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | | |
| | | | | | | | | | |
| Attachmen | | | A) 🗖 Jakas 🕾 | C | | | | | |
| | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO | O-948) | | w Summary (PTO-413) lo(s)/Mail Date | | | | | |
| 3) Inform | mation Disclosure Statement(s) (PTO-1449 or P ⁻ r No(s)/Mail Date | | | of Informal Patent Application (PT | O-152) | | | | |

Art Unit: 3748

DETAILED ACTION

This office Action is in response to the Amendment filed on November 28, 2005. Applicant's cooperation in correcting the informalities in the drawing/specification is appreciated. Claims 1, 3, 6-7, 9-10, 12-13, 19, and 23 were amended.

Upon the reconsideration, the indicated allowable subject matter of claims 4-5 and 23 has been withdrawn. A new Non-Final Rejection set forth below.

Claim Suggestions

Claim 23 is suggested to be corrected the minor informalities:

- Lines 5-7 should be revised by the following:

-- instruction for operating the turbochargers in a series configuration for a first operating region by actuating a plurality of valves to couple an outlet of a [[first]] **second** compressor to an inlet of a [[second]] **first** compressor and to couple an outlet of a [[second]] **first** turbine to an inlet of a [[first]] **second** turbine; and – (for co-operating with the specification and drawings).

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Application/Control Number: 10/710,678 Page 3

Art Unit: 3748

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Inaba (Patent Number JP 08-028287 A).

Inaba discloses a method for controlling a turbocharged internal combustion engine having at least two turbochargers (C, D, E) with at least a first compressor (25, 27) and a first turbine (26, 28), and a second compressor (29) and a second turbine (30) (See Figure 3), respectively the method comprising:

operating the turbochargers (D, E) in a series configuration for a first operating region by selectively connecting an outlet of the first turbine (28) to an inlet of the second turbine (30) (See Figure 3, as the valve 8 is closed); and

operating the turbochargers (C, D,) in a parallel configuration for a second operating region (See Figure 3, as the valve 8 is open);

wherein the first and second operating regions correspond to demanded airflow (See Paragraphs [0005] – [0006]);

wherein the step of operating the turbochargers in a series configuration comprises selectively connecting an outlet of the second compressor (from 29 to 25, 27) to an inlet of the first compressor (25, 27) (See Figure 3, and Paragraphs [0005] – [0006] of the attached machine translation copy).

Claims 7-8 and 12-23 and 25 are allowed.

Claims 6 and 9-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Ogawa (Pub. Number JP 2000-356136 A) discloses a two stage supercharging equipment of engine, using valves to switch from use of high pressure supercharger and low pressure supercharger of larger capacity when system speed exceeds limit from set range.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (571) 272-4867. The examiner can normally be reached on Monday - Thursday (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Application/Control Number: 10/710,678

Art Unit: 3748

published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTB January 04, 2006 Thai-Ba Trieu Primary Examiner Art Unit 3748 Page 5